REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

| 1. REPORT DATE (DD-MM-YYYY) | 2. REPORT TYPE | 3. DATES COVERED (From - To) | |
|--|------------------------|--|--|
| 30-09-2014 | Final Technical Report | 05/01/2013 - 04/30/2014 | |
| 4. TITLE AND SUBTITLE | 5a. CONTRACT NUMBER | | |
| ONR Ship Operations | | AN | |
| | | 5b. GRANT NUMBER | |
| | | N00014-13-1-0581 | |
| | | 5c. PROGRAM ELEMENT NUMBER | |
| | | N/A | |
| 6. AUTHOR(S) | | 5d. PROJECT NUMBER | |
| Murray Stein and James Harvey | | N/A | |
| | | 5e. TASK NUMBER | |
| | | N/A | |
| | | 5f. WORK UNIT NUMBER | |
| | | N/A | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) | | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| San Jose State University | | | |
| | 3.2 (7) | | |
| Research Foundation | | N/A | |
| Research Foundation 210 N. Fourth St, 4 th Floo | r | N/A | |
| | r | N/A | |
| 210 N. Fourth St, 4 th Floo San Jose, CA 95112 | | | |
| 210 N. Fourth St, 4 th Floo San Jose, CA 95112 9. SPONSORING / MONITORING AGENC | | 10. SPONSOR/MONITOR'S ACRONYM(S) | |
| 210 N. Fourth St, 4 th Floo San Jose, CA 95112 9. SPONSORING/MONITORING AGENC Office of Naval Research | | | |
| 210 N. Fourth St, 4 th Floo San Jose, CA 95112 9. SPONSORING/MONITORING AGENO Office of Naval Research 875 N. Randolph St | | 10. SPONSOR/MONITOR'S ACRONYM(S) ONR | |
| 210 N. Fourth St, 4 th Floo San Jose, CA 95112 9. SPONSORING/MONITORING AGENC Office of Naval Research | | 10. SPONSOR/MONITOR'S ACRONYM(S) | |
| 210 N. Fourth St, 4 th Floo San Jose, CA 95112 9. SPONSORING/MONITORING AGENO Office of Naval Research 875 N. Randolph St | | 10. SPONSOR/MONITOR'S ACRONYM(S) ONR 11. SPONSOR/MONITOR'S REPORT | |

12. DISTRIBUTION / AVAILABILITY STATEMENT

"Approved for Public Release; distribution is Unlimited".

13. SUPPLEMENTARY NOTES

N/A

14. ABSTRACT

This report documents the use of funds awarded by Office of Naval Research (ONR) for the continued operational support of the Research Vessel Pt. Sur and the associated Marine Technician Program.

15. SUBJECT TERMS

Research, Education

| 16. SECURITY CLASSIFICATION OF: | | 17. LIMITATION OF ABSTRACT | 18. NUMBER OF PAGES | 19a. NAME OF RESPONSIBLE PERSON Murray Stein | |
|---------------------------------|------------------|-------------------------------|------------------------|--|--|
| a. REPORT U | b. ABSTRACT U | c. THIS PAGE U | טט | 3 | 19b. TELEPHONE NUMBER (include area code) (831) 771-4134 |



RESEARCH FOUNDATION

Office of Sponsored Programs

210 N. Fourth Street, 4th Floor San José, CA 95112 Voice 408.924.1400 Fax 408.924.1496

www.sjsufoundation.org

September 30, 2014

To Defense Technical Information Center

8725 John J. Kingman Road, Ste 0944

Fort Belvoir, VA 22060-6218

From: Ricky Yoneda

Lead Enterprise Program Analyst

San Jose State University Research Foundation

Subject: ONR Pt Sur RV Award N00014-13-1-0581

Enclosed is the SF298 along with the final summary report which was sent previously. SF298 is enclosed per your office's request to Mr. Robert T. Schnoor, ONR Program Officer.

I can be reached at (408) 924-1441 or email: ricky.yoneda@sjsu.edu for any questions.

Thank you.

Enclosure

Final Technical Report ONR Grant # N00014-13-1-0581

Date: August 20, 2014

Name and Address of Institution:

Moss Landing Marine Laboratories Marine Operations 7539 Sandholdt Road Moss Landing, CA 95039

Document Title:

Office of Naval Research (ONR) Support for R/V Point Sur Ship Operations - Final Report

Grant Number: N00014-13-1-0581

Grant Period: CY 2013

Key People Associated with this Grant: Project Directors:

Captain Murray Stein, Marine Superintendent for Moss Landing Marine Laboratories mstein@mlml.calstate.edu 831-771-4134

Dr. Jim Harvey, Director, Moss Landing Marine Laboratories jharvey@mlml.calstate.edu 831-771-4402

Grant Administrator:

San Jose State University Research Foundation 210 N. Fourth St. 4th Floor San Jose, CA 95112 Federal Taxpayer ID# 94-6017638 Attn: Ricky Yoneda 408-924-1441 ricky.yoneda@sjsu.edu

Technical Information and Discussion of Work:

The ONR Ship Operations Award, N00014-13-1-0581, provided support for the *Research Vessel Point Sur* from January 1, 2013 through December 31, 2013. The *R/V Point Sur* is owned by the National Science Foundation (NSF) and operated under a Cooperative Agreement between NSF and the San Jose State University Research Foundation (SJSURF). Moss Landing Marine Laboratories, a consortium campus of the California State University system under the administrative authority of San Jose State University and SJSURF, has been responsible for the scheduling, maintenance and deployment of the vessel. The *R/V Point Sur* is a University-National Oceanographic Laboratory System (UNOLS) vessel and therefore adheres to the UNOLS Research Vessel Safety Standards and other Federal requirements for cost accounting and scheduling. The NSF inspection conducted on May 10, 2012 by NSF and Jamestown Marine Services determined the *R/V Point Sur* to be in compliance with regulations and required standards. The operational and technical capabilities of the vessel can be viewed at the ship's website: http://marineops.mlml:talstate.edu.

Final Technical Report ONR Grant # N0001 4-13-1-0581

January 2013 - December 2013

During this period, the R/V Point Sur supported the ONR funded project "Wave-Current Interactions in Coastal Inlets and River Mouths" with Principal Investigator and Chief Scientist Dr. Thomas H. Herbers of the Naval Postgraduate School. The 24-day cruise began in Moss Landing, California on May 21, 2013 and ended in Astoria, Oregon on June 13, 2013. The work included deployment of drifters, instrumented bottom tripods, and drifting GPS-tracked wave-resolving buoys in ebb and flood currents in the Columbia River Mouth. Bottom tripods with velocity profilers, pressure and surface tracking sensors were deployed in depths ranging from about 10 to 30 meters. Additionally, ship-board ADCP and CTD surveys were conducted to measure the vertical structure of currents and stratification. In addition, scientists Dr. Tim Janssen, Dr. Steve Elgar and Dr. Britt Raubenheimer (WHOI) participated in the cruise. After demobilization, the R/V Point Sur embarked on a 4-day transit cruise back to Moss Landing, CA where the vessel arrived at her homeport on June 22, 2013.

On September 16, 2013, John Joseph utilized the R/V Point Sur was for the deployment of a noise monitoring mooring to determine the characteristics of the ambient acoustic noise.

All costs for the operation of the vessel are outlined in the budget and briefly include: salaries for crew and shore support, overtime, benefits, maintenance, major overhaul, fuel, food, insurance, supplies, technical support and instrumentation, and miscellaneous costs such as security, rent, and utilities.

Biographical Information for Key Personnel: **CAPT Murray Stein**

B.S. Marine Transportation, Galveston, Texas, 1984

- Ship's Officer/Relief Master, Scripps Institution of Oceanography, San Diego, CA 1985-2011.
- Marine Superintendent, MLML May 2013-Present

Jim Harvey

San Jose State University, 1974. B.A., Biology/Marine Biology MLML,1979. M.S., Marine Biology Oregon State University, 1987. Ph.D., School of Oceanography

Professional Positions:

- Director, MLML May 2013 to Present, Interim Director Sept 2011 to May 2013
- Department Chair, MLML 2007 to Aug 2011
- Professor, Associate Professor, Asst. Professor, MLML Jan 1991 to Present